SATURDAY, JUNE 7, 1873.

ORIGINAL LECTURES.

CLINICAL LECTURE

ON A CASE OF HYDROTHORAX IN WHICH PARACENTESIS WAS PERFORMED.

Delivered at the Philadelphia Hospital, May 31, 1873.

BY WILLIAM PEPPER, M.D.

GENTLEMEN,—The patient to whom I ask your attention this morning has already demanded our careful study on account of the interesting and complicated symptoms he has presented. You will remember that the most important of these were profuse vomiting of blood, with ascites and large serous effusion in the right pleural cavity. But in order to bring the features of the case clearly before you I will briefly review its history, so far as I have been able to learn it.

William E., a shoemaker, aged 71 years, was admitted to the Medical Wards of the Philadelphia Hospital on March 25, 1873. He has led a regular and rather sober life, and enjoyed general good health. In 1845 he had a long spell of subacute rheumatism, and since then his heart has been at times troublesome, fluttering and palpitating; but he has had no cough or œdema of the feet. For one or two years past his urine has been heavily charged with urates, and he has been obliged to rise once or twice at night to void it. His digestion has been uniformly good until the past six or eight months, since when he has had a great deal of gastric uneasiness with sense of fulness and oppression after eating, and with eructations, but with little nausea or actual pain, and no vomiting. The action of the bowels has been very variable, either constipated or loose, and at times the ingesta have seemed to pass very soon, and almost unchanged. About the first of the present year, he noticed the abdomen enlarging, and since then he has been weaker, and his breathing has been more oppressed after exertion. On the night of March 20 he went to bed feeling as usual, but waked about midnight with a feeling of oppression at the epigastrium, and immediately vomited a large quantity of blood. The amount is represented as having been several quarts. This is in all probability an exaggeration; but at any rate the loss of blood was large enough to cause a dangerous state of exhaustion with almost complete loss of consciousness, from which he was but slowly recovering at the time of his admission, five days later. The hæmatemesis did not recur, but for several days afterwards there were black, tarry stools, evidently composed largely of altered blood.

On admission he presented an appearance of extreme anæmia, with a bloodless countenance, and blanched mucous membranes. His mind was dull and listless, with alarming exhaustion of strength.. There was complete anorexia, with an excessively dry and brown tongue. The heart's action was frequent, feeble, and very irregular, but no valvular murmur was detected. The abdomen was distended, and contained a considerable amount of effusion. There were also positive evidences of an effusion into the right pleural cavity extending up to the level of the second intercostal space.

The urine was free from albumen, and the deposit presented no evidence of kidney disease.

He was ordered a diet of milk and beef-tea given in small quantities, at short intervals, and in part administered by enema. He also took fifteen drops of oil of turpentine in emulsion, every three hours. By the 10th of April, the tongue having become cleaner and moist, with some return of appetite and power to digest food, while the effusion in the chest and abdomen were increasing, the turpentine was omitted, and he was ordered

℞ Pulv. scillæ, gr. j;
Pulv. digitalis, gr. ½;
Potassæ nitratis, gr. iij.
Ft. pil.
S.—Every third hour.

Under the action of this, the pulsations of the heart became much more slow and regular, so that the digitalis was omitted after the fourth day of its use. For some days there seemed to be a diminution in the serous effusions, but this was followed by increase both of the ascites and hydrothorax. There were habitually several serous stools in each twenty-four hours, usually at night, and the irritability of the bowels was so great as to render the use of even the mildest purgative inexpedient. Various changes were made in the diuretics employed, but without any good result.

Before detailing the subsequent treatment of the case, let us consider the diagnosis, and try to learn the most probable explanation of the complicated morbid phenomena present. The most prominent of these is unquestionably the vomiting of blood, which proved so nearly fatal about six weeks ago; and it is well to determine its cause first. The conditions of the stomach in which hæmatemesis occurs are not numerous. Occasionally it appears as a substitute for some bloody discharge which has been arrested; but I believe this is limited to women, in whom a process of vicarious menstruation may take place from the gastric mucous membrane. But apart from this, and the acute specific fevers in which vomiting of blood may occur, it usually depends on either cancer of the stomach, or gastric ulcer, or intense congestion of the mucous membrane. We may safely assume that there is no cancer of the stomach in the present case. The patient, it is true, has had dyspeptic symptoms for the past year, but there has been no progressive emaciation, and no cachectic or anæmic appearance until the occurrence of the late hemorrhage; there has been no epigastric pain nor tenderness, no vomiting, and examination reveals no tumor in the region of the pylorus. Again, the hæmatemesis which attends gastric cancer is usually small in amount; the blood oozes gradually from the diseased mucous membrane, mixes with the contents of the stomach, is acted upon by the gastric juice, and is finally vomited in the form of blackish particles mixed with altered food. It is comparatively rare for vomiting of pure unmixed blood to occur in cancer of the stomach, and extremely rare for the amount of blood so vomited to approach that which was lost in the present case.

Again, the idea of ulcer is discountenanced by the age and sex of the patient,—for ulcer of the stomach is much more common in early life and in women,—

and by the same absence of pain and tenderness and vomiting, all of which are its very constant attendants. It is true that sudden and very profuse vomiting of blood sometimes occurs in cases of perforating gastric ulcer; but the entire absence of the usual concomitant symptoms prevents us from accepting this interpretation of the present case. It must further be remembered that, upon the supposition of either cancer or ulcer, no explanation would be afforded of the ascites and hydrothorax, whereas it is in the highest degree probable that these conditions and the gastric hemorrhage are due to a common cause. The remaining condition to which I alluded as a possible cause of this hemorrhage was congestion of the mucous membrane of the stomach,—a state which occurs in a good many diseases, and which I am satisfied does not receive the attention it merits, either in a diagnostic or therapeutic sense. But it is only when this congestion depends upon a mechanical obstructive cause that it becomes sufficiently intense to cause the rupture of minute blood-vessels of the mucous membrane, and actual hemorrhage. It is possible that this may take place in some of the forms of obstructive heart disease, but as a matter of clinical observation it is chiefly in connection with cirrhosis of the liver that gastric hemorrhage from intense congestion occurs.

The explanation of such a connection is clear enough. The process of cirrhosis, attended at first with hyperplasia of the interlobular connective tissue which invests all the minute blood-vessels, and subsequently with contraction and induration of the entire organ, as these swollen tracts of connective tissue undergo change into dense fibroid bands, is associated from first to last with obstruction to the portal circulation, which increases until it becomes so intense that some relief must be afforded to the engorged veins which form the radicles of this great venous system. We see the first effects of this engorgement in the disturbed functions of the various abdominal organs. Digestion is impaired; there is a sense of fulness and oppression at the epigastrium, with eructations of gas or acid fluid, and occasional nausea and even vomiting (though this latter symptom is far from common), all of them evidences of the chronic gastric congestion and catarrh. The action of the intestines is irregular, torpor and constipation alternating with catarrhal diarrhœa, while the appearance of hemorrhoids attests the congestion of the lower bowel. The kidneys are engorged, and the urine, variable in amount, is usually heightened in color and loaded with urates. Later the increasing congestion produces even more serious results. Serous diarrhœa becomes habitual, or more commonly the serous effusion takes place from the surface of the peritoneum, and ascites is developed; and at last, particularly if there is any weakening of the vessels, as often occurs in advanced life, there are ruptures of the over-distended capillaries, with more or less profuse hemorrhage from the bowels or into the stomach, exciting hæmatemesis. So often indeed do these latter symptoms present themselves in the later stages of cirrhosis of the liver, that I enjoin upon you the great importance of suspecting and examining for the presence of that condition in every case of gastric or intestinal hemorrhage. You will see at a glance how completely the development of the case we are now studying together has corresponded with the hasty sketch I have given you of the symptoms of cirrhosis of the liver. You will see how well the diagnosis that our patient is suffering with that disease accords with his age, with the gradual appearance and characters of his gastric and intestinal dyspepsia, with the absence of severe pain, tenderness, tumor, or frequent vomiting, and with the presence of ascites, and ultimately of hæmatemesis. I have, therefore, no hesitation in deciding positively upon that view of his case. There is, however, one very important condition in regard to which you may naturally ask for further explanation. It is the large effusion which, as I before stated, was found in the right pleural cavity, and which can have no direct connection with the condition of the liver, since the pleural veins empty, by the azygos and superior intercostal veins, into the superior vena cava. There is, indeed, no little difficulty in explaining this part of the case, because the effusion is altogether limited to the right side. This might readily be accounted for if it were the result of inflammation of the pleura; but the entire absence of pain or febrile action during its development is opposed to this idea, and leads me to conclude that it is of the nature of a pure passive dropsy. There is no reason whatever for believing that the kidneys are seriously implicated in this case. The heart, although its action is very irregular, is the seat of no obstructive valvular lesion which could account for the development of this hydrothorax. We must, therefore, look for its explanation to the general conditions associated with the cirrhosis of the liver. And, in the first place, it must be remembered that no such extreme vascular obstruction as attends advanced cirrhosis can possibly occur without inducing a tendency to general venous stasis. Add to this that, in the present case, many influences have favored the development of a marked degree of anæmia, which strongly predisposes to serous effusion. And finally it is very generally found that, in cases of cirrhosis of the liver (especially, as it has seemed to me, when this comes on independently of alcoholism, as a form of senile degenerative fibroid change), there are alterations in the serous membranes and capsules of the solid organs throughout the body. It may well be, therefore, that in the present case slow changes have been occurring in the pleura which have favored the production of serous effusion there. It is clear that some, or all together, of these causes have led to the extensive hydrothorax which was found in our patient's right chest. But still it is not so clear why the effusion should have been limited to the *right* side, since all of the causes above mentioned would favor with equal force an effusion into the left side, and it appears scarcely reasonable to conclude that, while they led to the development of an enormous serous effusion on the right side, the left pleural cavity should remain entirely free. The only explanation of this which I can suggest is to be found in the special conditions of the lungs and

heart which I believe to be present; and on this account I have reserved the following results of their more careful examination until this time.

(To be continued.)

ORIGINAL COMMUNICATIONS.

EXCISION OF THE HIP-JOINT SUCCESSFULLY PERFORMED.

BY G. TROUP MAXWELL, M.D.,
New Castle, Delaware.

ON the 14th of November, 1872, I excised the hip-joint of Thomas Buckworth, at his father's home in Cecil County, Maryland.

Mr. Buckworth had labored under coxalgia, or tuberculosis of his right hip-joint, eighteen years. He was, at the time I operated, thirty-five years old, and the disease appeared when he was seventeen years of age. During that time, or from the sixth month after the first symptom of the disease —pain in right knee—showed itself, with a few short intervals, pus issued from orifices, or vents, it made for its escape, in the upper portion of the thigh. Several small pieces of bone had, at different times, made their exit also from the same openings. There had been, in all, six outlets for the bone and pus, but never more than two were in active eruption at the same time, some closing, as the pus would make other places of escape for itself. The limb was shortened about three inches, which caused a decided limping gait, and the discharge and long-continued irritation were gradually but surely undermining the patient's strength and health. Indeed, labor was impossible, and life had become a burden. As, notwithstanding the long continuance of this exhausting disease, there was evidence of considerable physical stamina and recuperative energy remaining, I deemed it proper and safe to excise the joint, and, accordingly, recommended the operation.

After sufficient preliminary and preparatory medical treatment and regimen, the operation was done on the day above mentioned.

I had the valuable assistance of Drs. W. H. Barr and Robert McKee, of Middletown, Delaware, on the occasion; and without much difficulty, the patient being profoundly under the influence of chloroform, the entire head of the femur and a considerable portion of the upper part of the rim of the acetabulum were removed.

As there was nothing remarkable about the mode of procedure, a detailed account of the operation is unnecessary. Believing that the greatest difficulties in most operations are overcome with increased facility when the external incisions are large, I first made a semi-lunar incision, with the convexity downwards, then a straight incision of four inches down the thigh, connected with the first at the point of its greatest convexity.

To wash out the wound I used a solution of carbolic acid,—two drachms to the quart of water,—and during the after-treatment a cloth wet with a stronger solution of the acid was kept constantly over the wound.

The patient came from under the influence of chloroform in a short time after the operation was concluded and the wound dressed, and evinced very little sign of shock. Not only did he enjoy almost entire exemption from depression of the nervous system immediately consequent upon the operation, but, what was equally surprising and gratifying to me, there was almost complete immunity from febrile reaction. His progress towards recovery was rapid and continuous until the twenty-fifth day. The purulent discharge was, of course, abundant during the first week; but it then steadily diminished, the wound healing rapidly at the same time. His spirits, appetite, and digestion were also in excellent condition. At the end of the fourth week, however, the whole appearance of the case changed suddenly. The discharge ceased wholly, the wound assumed a glazed, unhealthy look, and the parts about the joints were hot, red, and much swollen. In addition there was complete anorexia, —food being loathsome to the patient; and, withal, for the first time he lost spirits, and became despondent. Discovering the true nature of the complication and cause of the radical change in my patient to be malarial poisoning, he was quickly relieved by the administration of a few doses of quinine, and at the end of the fifth week his case had resumed its previous cheerful aspect. By the end of the seventh week the wound was healed perfectly, and the patient was walking about his room by the aid of a single crutch at the close of the ninth week.

The success of the operation is, therefore, absolute, as now—at the end of six months—he has a comparatively useful limb, shortened slightly, but with a little motion in the joint, and fitting him for employment in many vocations.

I have been succinct in the account of this case, as there was not anything peculiar about it, and the only purpose I have to subserve in its publication is to offer the encouragement which a successful operation may afford to the profession.

MAY 27, 1873.

BATRACHIAN METAMORPHOSIS WITHIN THE OVUM (*British Med. Journal*, May 3).—M. Jules Garnier, the explorer of New Caledonia, makes known through the *Revue Scientifique* an observation of M. Davay, *pharmacien* in Guadaloupe. It is to the effect that in the country there is a frog—the *Hylodes martinicensis*—which does not undergo the ordinary tadpole transformation, but is fully formed *in ovo*. On examining an ovum taken from the gelatinous mass in which they lie embedded under moist leaves, there is found a slender embryo with a large head, four styliform limbs, and a tail folded in. On touching the egg, the embryo changes its place. A day later, the embryo has a tail as long as its body, translucent and flat, like a tadpole's tail. The limbs then become developed, and some days later the little frogs escape, being of a deep brown-gray color, and not presenting the least vestige of a tail.

PHILADELPHIA
MEDICAL TIMES.
A WEEKLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

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SATURDAY, JUNE 7, 1873.

EDITORIAL.

THE SOCIAL EVIL.

AFTER all the discussion which has taken place in England with regard to the advantages and disadvantages of the Contagious Diseases Acts, it seems as if the question was practically settled by the results set forth in the official returns for the year 1872. We quote from the *Lancet* for May 10 the following statements, which, in our opinion, are worth volumes of theoretical opposition:

"It (the report) states that the women in the several places subject to the Acts attended with regularity throughout the year, and that in a few instances only was it necessary to take proceedings before a magistrate. The Acts have exercised a repressive influence in several ways. Notwithstanding, we are told, the continued influx of common women from unprotected districts, the total number in the several districts on the 31st of December last had been reduced. The beneficial working of the Acts is, however, more clearly demonstrated by the reduction in the number of juvenile prostitutes; and this is very striking. The number of prostitutes in the different districts under the age of seventeen on the 31st of December last was nine; whereas in 1866, when the Acts were first put in force, there were three hundred and seventy-seven under that age. Again, on the 31st of December last, those under the age of eighteen were sixty-seven; whereas in 1866 there were five hundred and ninety-five! The number of brothels has been reduced by eighty-six during the past year, many of those suppressed being of the lowest description: seventy-one young creatures between the ages of twelve and seventeen, and one hundred and thirty-five women between the ages of seventeen and thirty-one, who were known to have commenced immoral practices, gave up that course of life upon being spoken to by the police; and the Assistant-Commissioner's Report contains individual instances of many girls and married women who owe their rescue from a life of sin and misery to the well-directed and humane efforts of the officials engaged under these Acts."

In dealing with matters of this kind, the great point is to attack them where they are most vulnerable. We may not be able to get hold of the thread at the very end and trace it all the way through, untangling every knot, but if we can make a decided beginning,—as seems by the above showing to have been done in this instance,—the result may be even beyond our expectations. The main difficulty is, that the male sinners, to gratify whose passions the "social evil" exists, are not affected either by legal enactments or by social proscription. All they have to steer clear of is disease. But we do believe that it is far better to lessen the rampant luxuriance of vice, even if the measures must be partial, than to leave it unchecked. The way may open to still further reformatory proceedings. So far as we know, St. Louis is the only American city in which any attempt has been made to establish and enforce any systematic supervision of prostitutes by the police. We should like to learn what results have attended that experiment.

SANITARY MATTERS.

WE feel constrained to utter a note of warning, on the approach of another summer season, as to the inefficient protection afforded to the population of this city against the dangers which the hot weather brings with it.

Philadelphia was once known as the cleanliest of American cities. She showed to visitors, with much pride, her arrangements for an abundant supply of pure water. At the present time her streets are ill paved, dirty, and foul-smelling, and on the very threshold of the summer there is not a sufficiency of water, in the centre of the city, even for ordinary purposes.

With the mere matter of paving we are not now concerned; although badly-laid streets, where surface-draining is employed to so great an extent as here, are apt to become depots of stagnant water charged with unwholesome substances. We do most earnestly protest, however, against the whole system, or want of system, upon which some of the tax-payers' money is supposed to be laid out in a

pretence of keeping the streets clean. The shallowness of the pretence may be gauged in wet weather by the depth of the mud, in dry weather by the quantity of dust which every breeze brings to our nostrils. A law exists, but is in many neighborhoods a dead letter, against the throwing of kitchen offal into the streets. Everywhere the carcases of animals are seen scattered about, awaiting the chemical decomposition which is not only more certain, but more speedy, than the operations of the paid scavenger.

Bad as all this is, it is not so bad as the lack of water. With two great rivers flowing past, our citizens ought to have an absolutely unlimited use of this indispensable means of health and purity. And yet, year by year, every summer, the authorities are obliged to caution the public that there is danger of a water-famine. Let us imagine for a moment this state of things existing, and either a pestilence or a great fire breaking out. Is it necessary for us to hesitate in answering the question whether it would be better to spend a million or more in enlarging our mains, in providing more powerful pumping apparatus, or in arranging for some other source of water-supply,—or to let it go in the shape of lives destroyed by disease, or property reduced to ashes?

These are matters which will sooner or later force themselves upon the notice of the people. Better, far better, would it be to act promptly, to use the ounce of prevention, to "foresee the evil," as the wise man says, than to "pass on and be punished." A community, like an individual, may disregard the laws of hygiene, and live either in ignorance, recklessness, or defiance of them; but the time will come when the folly of such a course will be made unmistakably manifest.

CORRESPONDENCE.

To the Editor of the Philadelphia Medical Times.

DEAR SIR: Will you allow a stranger much interested in insurance matters to say a few words in regard to the interesting article on that subject in your number of May 17? While agreeing entirely with all that is said concerning the necessity for a thorough preliminary medical examination, and for an efficient and *entirely independent* body of medical examiners, I cannot admit that the only questions which should be raised, when a death-claim is presented, are those of identity and death, and that no misstatements in the application and no subsequent violation of the terms of the policy should be held to bar the claim.

There certainly appears no good reason why a life-insurance contract should not be treated as all other contracts are treated, and be liable to be set aside for fraud in obtaining it, or for the non-fulfilment of its conditions. If a man induces me to insure his dwelling-house, stating that the building is used as a dwelling-house only, and it appears afterwards that at that time he had petroleum stored in his cellar, surely no one holds that the *fire* policy is valid. Or if he puts the petroleum in the building after obtaining the policy, and contrary to its express stipulations, every one admits that the insurance is forfeited. Why should not the same rule apply where a *life* policy has been obtained by the concealment of some important fact or where some essential condition of good health and long life has been afterwards deliberately violated? Surely every company has a right to decide the conditions upon which it will make new contracts, and those who accept these contracts should not complain if the conditions are enforced. But the author of the article in question appears to go further, and implies that policies should not be so worded as to admit of this defence; that no such conditions should be imposed. This would oblige the companies to say to all comers, in effect, that if a rogue can only be cunning enough to escape the detection of his fraud on the preliminary examination, he need fear no future dispute of his claim, no matter what further information may subsequently be gained, or may be developed by the circumstances of the death. Is any other business conducted on such principles? Could it be safely? Does any merchant so regulate his private contracts? If so, why do we maintain courts of equity? If not, why should life-insurance companies alone among business associations be debarred from the relief those courts afford?

It must be remembered, too, that no preliminary examination, however careful, can elicit all the important facts of the applicant's condition. This business, like all others, has to be conducted largely upon faith in the statements submitted to us; and, as is done in every other business, the party making such statements should be held bound by them, and not the less because the real facts of the case are often, from their very nature, only to be discovered when death occurs.

It will be noticed that I do not here discuss the case when misstatements have been honestly made and with no intent to deceive any one. Neither do I wish to be understood as advocating or justifying the contesting of a claim on merely technical grounds. This, which is wrong in any business, is peculiarly so in life-insurance. But such cases are much less frequent than the public generally suppose. No one not familiar with the subject has any idea of the number of absolutely fraudulent claims presented to our insurance companies, or of the very large number of losses paid every year upon lives which never should have been insured, and which it is a moral certainty, though perhaps not to be proved legally, never would have been insured had the parties told the truth in their applications. So far from the companies being unduly anxious to contest such claims, it is certain that the managers of many of the mutual companies have incurred a very grave re-

sponsibility by the readiness, to use no harsher word, with which they have settled, without dispute, all sorts of losses, thus spending the money of their honest and truthful members in *charity* (for when no real right to the money existed, its payment could be nothing else) to the fraudulent or unworthy. For it must always be remembered, in regard to all these matters, that a mutual company is only an association of insured lives, and the fraudulent loss of the company is the loss of each individual member.

M.

PROCEEDINGS OF SOCIETIES.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY, NEW YORK.

SEMI-MONTHLY MEETING, May 14, 1873.

Reported by JAMES S. BAILEY, M.D.

DR. HENRY MARCH in the chair.

(Continued from page 556.)

ETIOLOGY OF BRIGHT'S DISEASE.

DR. F. C. CURTIS addressed the Society upon this interesting subject, and said:

It has been a subject of remark at post-mortem examinations that we very seldom see a perfectly healthy kidney. Although the same might be said of other organs, still it is true that Bright's disease is comparatively common.

The following case is peculiar only in regard to its etiology. Mr. L., the patient, was about 45 years old, a native of Canada, and by occupation a cooper; he had not, however, pursued his trade actively for some years, but had led an easy life. He has always been healthy, and his family history is good. He was of light complexion and of sanguineo-nervous temperament. There is no evidence that he has ever been of scrofulous habit; neither has he been intemperate in the use of stimulants. He asserted that he had always been perfectly healthy, excepting that he had had occasional attacks of sick headache, which were, as described, in no way peculiar. Aside from these he had no nausea or headache, his eyesight was normal, and he had no œdema. Prior to January last, the closest cross-questioning failed to detect any symptoms of disease of the kidneys, he being questioned with particular care, because he was under an accident insurance policy.

Early in January, while walking in the street, he slipped on the ice and fell, striking on his back and the back of his head, hurting no particular part, but causing a general jarring of the body. He states that he was unconscious for a little time, after which he had severe pain in the head, which persisted. He also vomited several times in the course of the morning. The fall did not, however, disable him so but that he was able to proceed directly to his business then in hand, which was of a pressing nature. He rode down town in an omnibus, walked to the lawyer's office, a short distance, and, after lying down for an hour or so, attended to the business, and then rode home as he came. His headache continued, and he vomited a few times, but was able to attend a trustees' meeting of his church in the evening from 7½ till 9 o'clock, though feeling badly. The headache persisted for three or four days, and his face was bloated.

On the third or fourth day his urine was noticed to be high-colored, and examination of it shortly after showed it to be highly albuminous. Occasional vomiting continued for a week or two, coming on especially when the head ached. About two weeks after the fall the lower limbs began to be œdematous. I saw him for the first time about the 1st of March; he then had no œdema of the face, nor did his face present the peculiar pallor of Bright's disease. He had some dyspnœa, but no cause for this could be ascertained, as his heart and lungs were healthy, and there was no peritoneal or pleuritic effusion. His general condition was fair, and he was able to be about the house. There was no disturbance of vision or other nervous symptom. His legs were œdematous. What his treatment was it is impossible to say, as he was under a homœopathic practitioner. I examined his urine at this time, six or seven weeks after his fall, with the following result: Color cherry-red; transparent, no precipitate; specific gravity 1022; albumen, I should say about five-sixths, as the test-tube was solid with it. Microscopically there was found renal epithelium, blood-globules abundant, blood, epithelial and granular casts. It seemed pretty clear from the examination that the disease was acute and of short duration, rather than that it had been running a latent course, now for the first time developing. The prognosis given at this time was that there was a possibility of recovery. The proportion of recoveries given by Frerichs from acute Bright's disease is two-thirds of those attacked, and Roberts thinks this below the average if cases resulting from scarlatina are included.

But the second examination of the urine, made three weeks later, seemed to settle the question of prognosis. The result of this was as follows: Urine a reddish color, opaque; reaction acid; specific gravity 1025; albumen three-fourths. Microscopically, blood-globules, renal epithelium—some of which was fatty—casts, which were abundant, were bloody, epithelial, hyaline, and fatty.

Evidently from this, the kidneys were passing beyond simple congestion and catarrh of the renal tubes. Here, within ten weeks of the onset, we see that there was fatty degeneration of the kidneys, with waxy casts, indicating chronic disease. According to the view of Frerichs, Niemeyer, and the German pathologists generally, that the different anatomical changes of the kidney are only stages of one disease, the kidneys in this case had passed from the first into the second stage. Whether or not this unity of the forms of Bright's disease be a correct pathology, this case seems to illustrate its truth to a certain extent. That the contracted granular kidney is a third stage, ultimate to the large white kidney, is more difficult to prove. In fact, I believe it is the general experience that patients having the large white kidney are more apt to die. I have in mind two cases occurring side by side, in the New York Hospital, when I was a student; one believed to have the "large white kidney," his symptoms being great œdema of the limbs, which was not relieved, although the urine was passed freely under diuretics: the pallor was very marked, symptoms of nervous disturbance presented, and he finally died with convulsions and coma. Here all the prominent symptoms of the affection were very marked. The other was considered a case of "small contracted kidney." He had no pallor, and no symptoms of nervous disturbance from first to last; nor was there any œdema, the only effusion being into the peritoneum and subsequently into the pleural cavities. Under the use of tinct. ferri chlor. and an occasional purge, he finally began to improve, the kidneys and skin acted freely, so that the serous effusion disappeared entirely, albumen and casts cleared up from the urine, and to all appearance the man was cured, and was so discharged from the hospital. In these two cases, presenting symptoms ascribed to the two pathological conditions, we see the one dying in the second stage (so called), while the other, so far as could be seen, recovered. The second

case related, moreover, never passed through the symptoms of the second stage as seen in the first case. The theory of this unity of Bright's disease has been, perhaps, gaining ground with us because of the many translations of valuable German works, recently made, but I think the division into acute, smooth white, small granular, etc., separate diseases, held by Roberts, Dickinson, Wilks of Guy's Hospital, and others, has been the most commonly received here and in England. The possibility of a passage from a first to a second stage, illustrated by the case in hand, is not, that I know of, doubted.

After the second examination of the urine an unfavorable prognosis was given. The patient, however, at this time presented, clinically, an improved appearance. Later the œdema increased, the limbs, scrotum, and penis swelled; he failed steadily, and died without the occurrence of any symptoms of nervous disturbance, eighty-six days after the fall to which his death is attributed.

A post-mortem examination was made next day. The parts were found œdematous, as above mentioned. There was no effusion into the serous cavities. The lungs were healthy. The heart was somewhat enlarged, but the valves were normal and competent. Abdominal organs healthy, except the kidneys; these were much enlarged, white, smooth, and fatty. The capsule stripped up readily, leaving a smooth surface under it. The pyramids were partly destroyed. There were ecchymotic spots of small size in the left kidney. Microscopical examination showed abundance of fat in the tubes and fatty degeneration of the epithelium.

The termination of this disease fatally within three months of its alleged cause makes the etiology here especially important. Clearly, the man died of Bright's disease simply. Had this been running a latent course and developed at the time of, perhaps by, the injury? Hardly; for some symptoms of failing health must have been apparent, even though a diagnosis had been impossible. The urinalysis, too, shows pretty conclusively that the inflammation of the kidneys was a recent one. Both subjective and objective symptoms point to about the 1st of January as the probable time when the disease commenced.

The usual causes of Bright's disease are, exposure to cold, the use of alcoholics, and the influence of zymotic poisons, more especially scarlatina.

Minor causes are hereditary tendency or constitution of body, such as scrofula and tubercle, excessive use of such drugs as copaiba, turpentine, etc., pregnancy, and other conditions. All authorities are unanimous in giving these. Aitken alone alludes to certain causes which, to quote his words, "may be regarded as mechanical causes of irritation, but which so secondarily affect the constitution of a person predisposed to the disease, that Bright's disease, rather than any other, is the result,—*e.g.*, the irritation of blows, of cantharides or other irritants, the presence of calculi in the kidney, etc." In other words, in a person predisposed to this disease by climate, habit of life, or other condition, irritants, including traumatic injuries, may develop it. We cannot find in this case any predisposing cause: the accident occurred in steady winter weather, his occupation did not expose him to cold or moisture, his health was at its usual standard, and he had always been free from disease; his habits of life were in all respects temperate; the post-mortem showed his other organs to be healthy. In short, none of the ordinarily accepted causes, predisposing or exciting, can be found.

The question of causation seems then either to be limited to the fall, acting simply and alone to produce the disease, or else the case is one of those in which the most searching analysis fails to detect the cause. The possibility of the fall acting as a cause for Bright's disease, unless effecting traumatic injury to the kidney, may well be doubted. Could reflex action or injury to nerve-centres produce disease of the kidney? It does not appear improbable, but I do not know any direct authority for it. It is not easy to express opinion in matters so vague as such suppositions lead us to. I should be glad to hear the views and experiences of others in the matter.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, APRIL 24, 1873.

THE PRESIDENT, DR. J. H. HUTCHINSON, in the chair.

DR. H. LENOX HODGE exhibited a *multilocular ovarian cyst* removed by ovariotomy on Saturday, April 12.

The tumor weighed fifty-five pounds, and consisted of many cysts, great and small. The fluid varied much in consistency, part of it being nearly as firm as jelly, and part of it quite limpid. The color also varied much, being, however, mostly dark. The tumor came from the left ovary, and had a pedicle about four inches in length. It was first noticed sixteen months ago. The patient is forty years of age, and had been tapped four times. The tumor was removed by ovariotomy twelve days ago, and thus far the patient has done very well.

Specimens of the fluid were submitted to Drs. BERTOLET and RICHARDSON for examination.

Dr. R. M. BERTOLET said he had examined the fluid from this tumor and had found the specific gravity 1014. Microscopically it contained free nuclei, granular matter, cholesterine crystals, and epithelial cells derived from the lining of the cyst-walls. Most of these cells had undergone fatty degeneration and disintegration. The so-called compound granule-cells were numerous, but presented nothing peculiar. He had seen similar cells in other fluids derived from the abdominal cavity. On the addition of acetic acid some of these exhibited a reaction similar to that of leucocytes, but the majority were much larger than pus-corpuscles. On the addition of ether the granules and globules disappeared. He thought it was quite impossible to base a diagnosis of ovarian tumor upon their presence.

Dr. JOSEPH G. RICHARDSON had also examined the fluid, but said he had very little to remark in addition to what had been stated by Dr. BERTOLET. He had, however, measured a number of these corpuscles, and found them to average $\frac{1}{100}$ of an inch in diameter, and to be generally stuffed with oil-globules of considerable size. He thought that their diagnostic value might lie in the fact that the flat endothelial cells would not be likely to become distended so as to assume a spherical shape. The globules of oil contained in them were sometimes very large, occasionally $\frac{1}{100}$ of an inch in diameter. In some of the cells in which the fatty degeneration was less advanced, he had been able to distinguish a cell-wall.

Dr. BERTOLET said that, as a rule, the corpuscles were without a cell-wall, and appeared to be merely an agglomeration of fat-granules.

Dr. RICHARDSON further remarked that in two or three cells he had been able to make out a nucleus. It was single, and of large size. He desired to know of Dr. BERTOLET whether he knew what was the thickness of these endothelial cells which line the cavities in fibro-cystic growths of the uterus, for example.

Dr. BERTOLET, in reply, said he had never taken the trouble to measure their thickness. Other forms of cells, columnar, even ciliated epithelium, had been found in ovarian fluid by Peaslee and others.

Dr. RICHARDSON said the point which he wished to

make was that these very flat endothelial cells of uterine cysts would not be likely to swell up so as to assume a spherical form by their fatty degeneration.

Dr. JAMES TYSON said that the compound granule-cells were not necessarily derived from the flat endothelial cells, but perhaps descended from the deeper layers of cells of spherical shape which physiologically impressed would become the flat endothelium, but pathologically impressed became compound granule-cells.

Dr. W. G. PORTER exhibited, for Dr. H. LENOX HODGE, *sections of femur and tibia, and the patella*, removed in the operation of *excision of the knee*, done this morning at the Presbyterian Hospital. The patient is a young man, twenty-six years of age. When a child of three years, he began to suffer with inflammation of the left knee, which has continued with more or less violence ever since. The limb had become much wasted and useless. He could not bear any weight upon it without suffering much pain. There was slight motion at the joint. The patella was firmly adherent to the femur by bony anchylosis. The femur and tibia were bound together by strong fibrous bands. In the left side of the head of tibia an abscess was found extending more than an inch in depth from the joint. As the section shows, only the articulating surface was removed. The position of the abscess was treated by the gouge.

Dr. J. SOLIS COHEN exhibited a *fragment of bone removed post-mortem from the larynx* of an adult male.

Dr. BERTOLET said this was a truly remarkable specimen, and he could easily see how it could be mistaken for a necrosed cricoid cartilage. Had the curve been turned the other way it could easily have been seen laryngoscopically, and extracted; but in its present situation extraction would have been impossible without laryngotomy.

He said it was a disputed question as to whether necrosed cartilages partially ossified should be removed. In this case an operation under the supposition that the foreign body was a necrosed cartilage would have been a fortunate one. Indeed, Dr. BERTOLET considers the operation at all times a proper one, since there is always more or less danger of the detached fragment falling into the trachea or becoming impacted in the glottic fissure.

The specimen was referred to Drs. HARRISON ALLEN and W. W. KEEN for examination. These gentlemen reported as follows:

"The committee to whom was referred the specimen of the larynx exhibited by Dr. J. Solis Cohen at the last meeting of the Society, have the honor to report that they found the specimen opened along its posterior wall,—the cricoid cartilage being divided at the median line. The cartilages were more or less ossified. The cut through the cricoid showed within this cartilage extensive bony change. The mucous membrane was everywhere intact, save at two points a little below the vocal cords, where ulcerative abrasions were seen, each about the size of a grain of barley.

"Accompanying the laryngeal specimen was a fragment of bone. The committee was informed that it had been found lying across the cavity of the larynx, and had maintained its position at the sites of the lesions already mentioned. The fragment resembled a portion of a bony ring. Its concave surface was smooth; its convex was somewhat roughened and marked by a central pit. One of the sides was rounded and even, another was uneven, and apparently eroded. The first-mentioned border was obliquely facetted. The facets were oblong, and had been at one time probably covered with cartilage. The fragment measured seven lines through its greatest length, and three lines through its greatest width. It resembled in its general outline a portion of the ossified cricoid cartilage. This structure, however, was in position and apparently unchanged by any loss of tissue.

"The committee were unable to identify the specimen with any portion of the skeleton of an animal which may have been partaken of by the patient with his food."

THURSDAY EVENING, MAY 8, 1873.

THE PRESIDENT, DR. J. H. HUTCHINSON, in the chair.

CHRONIC ARTHRITIS OF THE KNEE.

Dr. H. LENOX HODGE exhibited *sections of the femur and tibia and the patella*, removed by the operation of excision of the knee, done nine days ago, at the Presbyterian Hospital. Thus far the patient has done well. He is eight years of age, and has suffered from inflammation of the knee for about three years. The knee was partially flexed, and retained limited movement. The child could not make use of it in walking, and suffered pain on pressure. On inner side of lower part of femur there was a scar of an old abscess. The internal condyle of the femur has a deep ulceration upon it, causing a large indentation. The rest of the articulating surfaces seem free from disease.

Dr. H. ALLEN suggested that in view of the position of the patch of ulceration—viz., at the side and near the front of the condyle—the disease had been located in the epiphysis, and not primarily in the joint.

Dr. JOHN H. PACKARD said that he thought, and that only a day or two ago his attention was called to the distinctly expressed opinion of a leading English surgeon, that when the patella was allowed to remain it often became the cause of further disease. He himself thought also that a limb in a very slightly flexed position was more available for walking than a straight one; that a patient with his leg in a straight line was in the condition of a man with the old-fashioned wooden leg.

Dr. ASHHURST asked whether the synovial membrane appeared diseased.

Dr. HODGE replied that over the internal condyle there was evidence of ulceration, extending even to the bone.

Dr. PACKARD remarked that, except where the peculiar construction of the joint, as in the shoulder and hip, would not permit it, he believed it to be the accepted rule to make a complete exsection rather than a partial one, so as to have two fresh bony surfaces opposed. In the ankle he thought the rule was also less important. With regard to the latter joint, he would like to know whether any one had had the opportunity to dissect this part after the operation of excision. He had in one instance excised the astragalus in a child, and in course of time its place seemed to become filled by a new formation.

Dr. ALLEN asked how the child walked after the astragalus was removed.

Dr. PACKARD replied that the child walks perfecly well. There is free motion and no tenderness whatever.

The PRESIDENT confirmed what Dr. Packard said with regard to loss of the astragalus, by the instance of a boy who came under his notice at the Pennsylvania Hospital, having lost this bone, and in whom there was subsequently no impairment of motion.

Dr. ALLEN remarked that the relations of the astragalus to the arch of the foot showed that the weight of the body is transmitted mainly along its axis. This understood, it becomes interesting to study the mechanism of progression after the removal of the astragalus. He thought it probable that the weight would in that event be thrown more upon the calcaneum, and the arch of the foot, if not destroyed, at least greatly impaired.

Dr. HODGE said that when the bone is discharged by disease, and the periosteum remains intact, regeneration may be expected to take place, and mentioned a case in which he removed two-thirds of the tibia in its whole thickness, and stated that the bone has been reformed and the limb is perfectly useful.

Dr. PACKARD referred to an old case of excision of the astragalus, by Dr. Levis, in which there is a depression, but the boy walks well.

Dr. DE F. WILLARD said he thought the malleoli might be thrown into a new position, rotating on their longitudinal axis so that the internal would move forward and the external backward, as seen in cases of club-foot of long standing in adults.

Dr. J. EWING MEARS presented a specimen of *follicular colitis*, taken from a child aged eight months. The patient manifested the symptoms which usually accompany this affection, convulsions finally supervening, which terminated in death.

Post-mortem examination revealed marked passive congestion of the brain, with serous effusion into the lateral and third ventricles. The stomach, liver, spleen, and small intestines were healthy. The only lesion found was that shown in the large intestine, which implicated principally the ascending and transverse portions.

REVIEWS AND BOOK NOTICES.

HANDBOOK FOR THE PHYSIOLOGICAL LABORATORY. By E. KLEIN, M.D., Asst. Prof. in the Pathological Laboratory of the Brown Institution, etc.; J. BURDON-SANDERSON, M.D., F.R.S., Prof. of Practical Physiology in University College, London, etc.; MICHAEL FOSTER, M.D., F.R.S., Fellow of, and Prælector of Physiology in, Trinity College, Cambridge; and T. LAUDER BRUNTON, M.D., D.Sc., Lecturer on Materia Medica in the Medical College of St. Bartholomew's Hospital, London. Edited by J. BURDON-SANDERSON, M.D. In two volumes 8vo. With one hundred and thirty-three Plates, containing three hundred and fifty-three Illustrations. Vol. i., Text. Vol. ii., Plates. Philadelphia, Lindsay & Blakiston, 1873.

No more useful aids to medical instruction have been supplied us in modern times than these volumes furnish. They are the first fruits of the new education, the object of which is to teach men to observe, think, and deduce, as well as to remember. We are told that the book is intended for beginners in physiological work, but we believe there are no teachers of physiology and histology in this country who would not teach with new enthusiasm by making it their guide. We believe, moreover, that there is no other book, in any language, so useful to teacher or student in the departments which it covers. For, in addition to the fact that there is no single work in the German which covers so extended a field, there is, even in those extant, a want of preciseness in the directions given which makes them unsatisfactory to beginners.

Part first, by Dr. Klein, is taken up with practical histology. The skill of Dr. Klein as a teacher of practical histology is well known to many Americans who have profited by it in Vienna and London, and these will hail with pleasure the extension of his usefulness which grows out of the issue of this book.

The subjects treated in part first are—the blood; epithelium and endothelium; connective tissues, including cornea, bone, and cartilage; muscular tissue; tissues of the nervous system, including the terminations of nerves; methods of preparation of the compound tissues, imbedding, section-cutting, etc.; the vascular system, including injections, structures of the blood-vessels, and microscopical study of the circulation; the lymphatic system; organs of respiration; organs of digestion, including the liver and spleen; the skin, cutaneous glands, and genito-urinary apparatus; organs of special sense; embryology, to which Dr. Klein has given much study, and on which he is an admitted authority; and, finally, the study of inflamed tissues, including inflammation of epithelium, endothelium, of cartilage, of bone, inflammatory changes in the liver-cells, in the cornea, in the tongue of the frog, and in the tadpole's tail.

Thus is covered the whole domain of practical histology, and throughout it the most accurate directions are given, so that if these are followed, with the assistance of the admirable plates, of which the only criticism that can be made is that they are not in the same volume with the text, one cannot go astray. To one who has had the advantages of Klein's personal instruction, reading the book seems like rehearsing with the master, so practical, so much to the point,—in fact, so like Klein does the text read.

The second part of the book, on Practical Physiology, is by Dr. Burdon-Sanderson. Those who have read his lectures on this subject in the *Medical Times and Gazette*, a year ago, will recognize much that was then published, and will be glad to have it in its present convenient form.

The subjects treated are—

1. THE BLOOD—*a.* the liquor sanguinis, or plasma; *b.* conditions affecting coagulation; *c.* the coloring-matter, its chemical properties, and the action of various agents upon it; *d.* gases of the blood, and methods of analysis.

2. THE CIRCULATION OF THE BLOOD, in which are described the kymograph, accessory apparatus and their uses; also the sphygmograph and experiments with the schema relating to the form of the arterial pulse. The functions of the vaso-motor nerves, with experiments illustrating them, occupy considerable space, and make this subject clearer than has heretofore been done. A complete study of the movements of the heart, with the influence of nerves and ganglia, and directions for the use of appropriate apparatus to illustrate the former, are contained in this chapter.

3. RESPIRATION is similarly treated in the next chapter; 4, ANIMAL HEAT, including thermometry, in the next.

The third part of the volume, also on physiology, is by Dr. Michael Foster, on the functions of muscle and nerve. An accurate description of special apparatus, more particularly electrical, is followed by a chapter on the general properties of muscle at rest; another on preliminary observations on the stimulation of nerve and muscle; a third on phenomena and laws of muscular contraction; a fourth on the wave of muscular contraction; a fifth on tetanus; a sixth on electric currents of muscles; a seventh on stimulation of nerves; an eighth on phenomena accompanying a nervous impulse; a ninth on various forms of stimulation of muscle and nerve; a tenth on urari poisoning and independent muscular irritability; an eleventh on the functions of the roots of spinal nerve, including recurrent sensibility; a twelfth on reflex action, and a thirteenth on some functions of certain parts of the encephalon.

Precise directions for experimentally showing all these points are laid down.

Practical physiology is continued in the remaining part, by Dr. Lauder Brunton, on digestion and secretion, with introductory chapters on the albuminous compounds and the chemistry of the tissues. In this are included albumen, its properties, and alterations

produced in it by acids and alkalies, a synopsis of albuminous compounds, including leucine and tyrosin, with their tests. The chemistry of the tissues includes that of nerve, muscle, connective tissues, etc. The chapter on digestion is a store-house of experiments, which will be of great use to the lecturer on physiology. Scarcely enough stress, in view of existing impressions with regard to it, is laid upon the utter inapplicability of all the ordinary modifications of Pettenkofer's test for the determination of bile-acids in the urine. That of Strassburg, which is given, and which consists in adding a little cane sugar to urine containing bile-acids, dipping a piece of filtering-paper into it, letting it dry completely, and then adding a drop of pure sulphuric acid, we have found no more satisfactory than the rest. If the bile-acids are present, according to Strassburg in a quarter of a minute a beautiful violet color appears, which is best seen by holding the paper up to the light and looking through it. Dr. Brunton states, however, that in all doubtful cases, and wherever accurate results are required, the bile-acids should be separated before applying the test. We believe no other method than this, as directed by Hoppe-Seyler, is available for accurate investigations, and this is so long and tedious as to be quite beyond the use of the practitioner.

Among the secretions are considered milk and urine. This part of the work is less complete than the others, and is more of the nature of a compilation from the physiological chemistries of Gorup-Besanez, Kühne, Hoppe-Seyler, and others. It is nevertheless very useful, and adds greatly to the completeness and utility of the entire treatise.

To the book is added an admirable appendix of "Practical Notes on Manipulation," including manipulation of glass tubing, solution and ebullition, evaporation, filtration, etc.

MINERAL SPRINGS OF NORTH AMERICA: HOW TO REACH AND HOW TO USE THEM. By J. J. MOORMAN, M.D., Physician to the White Sulphur Springs, etc., etc. Crown 8vo, pp. 295. Philadelphia, J. B. Lippincott & Co., 1873.

The first edition of this work was issued, in pamphlet form, in 1839, as a directory for those seeking the benefits of the White Sulphur Springs in Virginia. Since that time, in successive editions, it has undergone a great increase in scope, until this, the seventh, embraces all the well-known springs of the Northern Continent of America.

Dr. Moorman has given, as might have been expected, a much larger space to the springs of Virginia than to those of any other State. This is partly owing to the fact of the much greater development of their natural advantages in that part of the country than elsewhere, but mainly, doubtless, to his own familiarity with them. His directions are sound, clear, and practical, and will be of use to many physicians in influencing their advice to patients. The analyses given of the various mineral waters are derived from the best authorities.

The mechanical execution of this book leaves nothing to be desired, while its size will make it very convenient for reference.

THE MINERAL SPRINGS OF THE UNITED STATES AND CANADA; with Analyses and Notes of the Prominent Spas of Europe, and a List of Seaside Resorts. By GEORGE E. WALTON, M.D., Lecturer on Materia Medica in the Miami Medical College, Cincinnati, etc., etc. Small 8vo, pp. 390. New York, D. Appleton & Co., 1873.

This is a very good book, especially in its arrangement; the various springs being classified, not according to regions, but according to their physical peculiarities and medicinal effects. A slight tendency to the absurdity called "popular medicine" only excepted, the scientific portion of the work is well done. Clear directions as to the railroad routes, illustrated by maps, add greatly to its value both to patient and of physician.

GLEANINGS FROM OUR EXCHANGES.

KRAUSPE ON EXTENSIVE DILATATION OF THE ARTERIAL SYSTEM.—Dr. Krauspe records (*Berliner Klinische Wochenschrift*, March 17, 1873) a case from the polyclinic of Dr. Nothnagel of Freiburg, in which a condition of aneurismal dilatation of the vessels was found extensively distributed over the arterial system. A man, aged sixty-four, short and thin, and suffering from an acute exacerbation of chronic bronchitis, which had probably existed for many years, was found to present the following condition after the acute attack had passed off. There were symptoms and physical signs of chronic bronchitis and emphysema. Enlargement of the right ventricle was not demonstrable locally; the left ventricle was hypertrophied and dilated. The cervical veins were excessively dilated, with regurgitation, but no pulsation. The kidneys were congested. There was no subcutaneous œdema. In various parts of the arterial system there was evidently present aneurismal dilatation of the vessels, both as smaller circumscribed aneurisms, and as extreme dilatation of considerable portions of the arteries. The vessels of the neck presented this condition to a very striking degree and extent. The right common carotid artery, apparently normal below, speedily became extremely dilated, reaching the diameter of 2.5 centimetres; and there was corresponding dilatation of the right external and internal carotids. The left common carotid artery and its two branches were equally dilated with the vessels of the right side, but the main trunk was at the same time considerably elongated. The thyroid and lingual arteries of both sides were visible, dilated, and tortuous. The temporals were narrower than usual. All the dilated arteries in the neck were pulsating strongly. The radial arteries were somewhat tortuous; the walls were not rigid, their circumference was moderate, the tension rather small, and the pulse-wave low. The right brachial artery was somewhat tortuous, and in its diameter and strength of pulsation almost equalled the axillary. The left brachial was decidedly smaller than the right, and markedly different from the corresponding axillary, which was dilated nearly to an aneurism. The abdominal aorta could be very easily felt, and was much elongated and tortuous; it was not perceptibly dilated. In the right femoral artery was found a distinct but not great dilatation, with weak systolic murmur, and the walls of the vessel in its whole course were somewhat rigid. On the left side a similar aneurismal dilatation was doubtfully present. In the popliteals and tibials, nothing abnormal was discovered. In short, there was dilatation and elongation of the carotid arteries and some of their branches, and of the brachials (not marked); small sacculated aneurisms of the femoral and left axillary arteries; and elongation only, so far as could be discovered, of the abdominal aorta. There was probably also dilatation of the ascending aorta; for, with hypertrophy of the heart, there was no marked dilatation in the subclavian or brachial arteries.

Such enormous widening of the vessels, says Krauspe, must clearly cause great obstruction to the blood-stream; and this is compensated for by the hypertrophy of the left ventricle. In regard to the relation of hy-

pertrophy of the left ventricle to thickening of the arterial walls, one might ask which of the two changes in the present case had been the first, the vascular or the cardiac. The author believes that the aneurismal change in the vessels was the original disease, because in the first place there were sacculated aneurisms in addition to the general dilatation; and, secondly, because there was not dilatation of all vessels under the same conditions. There was probably then an aneurismal diathesis to start with, and a consequent hypertrophy of the heart.

The cervical veins have been already described as excessively dilated in this patient. The external jugular veins were like thick cords. The right internal jugular vein was uniformly dilated, reaching, at the point corresponding to the valves, the breadth of three centimetres. Krauspe confesses that this dilatation of the veins of the neck is very difficult to account for. It was probably due, he thinks, to the long-standing emphysema, with some aggravating local cause, such as the pressure of the dilated aorta, or the effects of a large abscess of the neck, from which the patient had suffered many years before.

In February, 1873, a woman, aged 23, came to him with severe pain about the middle and just outside of the right tibia, of two or three years' standing; much more severe during past year. Attacks were like flushes, extending generally upward, lasting from a few minutes to one or two hours. No cause named, unless fatigue. There was slight discoloration of the skin, as large as a pin's head. Blood-vessels of skin not enlarged. On pressure, a body of the size of a bean was felt, rolling under the fingers, seemingly in the cellular tissue, and attached by a small point to the skin; not tender, except when pain was severe. Tumor was removed, with the attached piece of skin. No pain since. Tumor was as large as a bean, firm, imbedded in cellular tissue; connected with capsule, but otherwise free. Being cut open, a white surface was presented, of cartilaginous hardness, without blood-vessels. No nerve-cells were found with a moderate magnifying power.

The first and best general description is given by Wm. Wood, in *Edinburgh Medical and Surgical Journal*, in 1812; it also received its name from him. Dr. J. C. Warren, the elder (Surgical Observations on Tumors, p. 59), describes three cases; in two, removal was not allowed. In the third, a man had suffered seven years, and for four very severely, from pain about three inches below the knee. When seen by Dr. Warren, there was an open ulcer, following the use of caustics; physical condition bad, with cough, purulent expectoration, quick pulse, emaciation, etc. Amputation was performed, and patient recovered in three months.

These tumors occur in adults; and in women rather than men, in the proportion of four to one. Paget (Surgical Pathology, Second American edition, p. 393) says, "They may be formed either of fibro-cellular or fibrous tissue, in either a rudimental or a perfect state," or "they may be fibro-cartilage."

Wedl (Pathological Histology, p. 401) found "a new formation of connective tissue which, at any rate for the most part, retained an embryonic character. Not a trace of nerve-substance could be discovered in the interior of the nodule." Billroth found muscle-cells, but no nerves; Bärensprung, peculiar knots upon the blood-vessels around tumor. Paget thinks they are not neuromata, because nerve-fibres cannot be demonstrated in them; because neuromata are often multiple, are unlimited in size, and are most frequent in the male sex; these occur singly, are smaller in size, and more frequent in women.

Some observers consider these tumors to be developments of the Pacinian bodies.

Virchow (Die Krankhaften Geschürelste, vol. iii. p. 241) says that he has seen one removed from the knuckle, which a nerve entered and left, and the mass was made up of obscure nerve-fibres. He adds, that most pathologists of the present day would call such tissue briefly fibroid, fibro-plastic, or fibro-nuclear, and thinks that we need more and more exact observations.

There is a point worth noticing. Cartilage is not known to have nerves; it is not sensitive; when inflamed, it is extremely sensitive, but even then it has no nerves, so far as is known. Has not cartilage assumed new functions? In painful subcutaneous tumors, has not connective tissue similarly assumed new functions?

CASE OF RENAL ABSCESS, WITH CONTAINED CALCULUS, SUCCESSFULLY RELIEVED BY OPERATION.—This rare case is reported by Mr. Thomas Annandale, in the *Edinburgh Medical Journal*. The patient, a farmer, aged sixty-three, had been suffering for several weeks from gastric and renal derangement, the symptoms increasing in severity, and finally pointing pretty clearly to some affection of the right kidney. The first examination determined that there was tenderness on pressure over the lower half of the right kidney, and below it in the direction of the ureter. A very slight fulness in the same region was noted, but no marked swelling could be detected. No fluctuation could be felt, and the introduction of a fine trocar in the lumbar region gave no result.

At the expiration of nearly a month, he was seen for a second time by Mr. Annandale, and upon this occasion his symptoms were very much worse. It was now thought that deep fluctuation could be detected through the anterior abdominal wall, just below the region of the affected kidney, and, in accordance with the urgent request of the patient, it was decided to try and do something for his relief, and make at least an exploratory incision. The incision was made through the abdominal wall, in the situation and direction of the incision employed for the ligature of the common iliac artery. Pushing aside the peritoneum and abdominal contents, the psoas muscle was reached with the finger; by the inner side of this muscle an abscess was detected, and within this abscess-cavity was found a calculus, the size of a horse-bean, which was seized with the forceps and removed.

The operation gave great relief, and the patient improved steadily up to the fifth day, when a small quantity of thin, feculent matter passed the wound, and fæcal matter continued to pass the wound for nine days after the operation, from which time no further discharge was observed. By the end of a month the patient had apparently made a good recovery.

In commenting upon this case, Mr. Annandale remarks that the whole trouble had its origin in a renal calculus, which had given rise to suppuration and ulceration, and in this way escaped from the kidney. The abscess, passing downwards, was preparing to empty itself into the ascending colon or cæcum; in fact, a small opening of communication with the intestine had already been made, and the further destruction of the intestinal wall was only prevented by the free escape of pus. The result of this case affords additional encouragement to surgeons to operate early in cases of abdominal or pelvic abscess, in which the timely use of the knife may relieve suffering and even save life.

ACARO-DERMATITIS AUTUMNALIS.—Dr. J. W. Southworth, of Toledo, Ohio, describes, in the *Detroit Review of Medicine and Pharmacy*, this affection, which is found mostly on the lower extremities of laborers and others who frequent vineyards and harvest fields of grass or grain, in the latter part of the summer and autumn. It

presents itself as a more or less pruritic and intense erythemation, in patches of greater or less size, according to the number of parasites present. Occasionally, wheals are formed in the immediate vicinity of the animalcules, especially in sensitive subjects who have indulged in much scratching. The skin may be lacerated and swollen. Violent inflammation of the latter, and of its underlying tissues, resulting in sloughing, suppuration, or gangrene, to such an extent as to imperil life or necessitate amputation of the affected limb, has been known to occur. This latter is reported to have happened among some troops at Martinique.

Its cause is the attacks of the acarus autumnalis, or harvest-mite, which, on account of its bright-red color, is also called *rouget*, or *bête rouge*, by the French. Septus autumnalis is another synonym. Neumann states that Gruby has described this parasite in the *Allg. Med. Zeitung*, 1863, under the head of aracnide.

The diagnosis is quite easy, as the acarus is readily found, with its blood-distended abdomen, partially imbedded in the inflamed tissues; a minute, red, oval body, requiring a little care and close inspection to detect in some instances. It may be found on almost any portion of the skin, but is chiefly met with on the inferior extremities.

The treatment is by careful removal of the parasite with forceps where there are only a few; and when the reverse is the case, the application of some efficient parasiticide, as a spirituous solution of carbolic acid, corrosive sublimate, or camphor sufficiently diluted with water to prevent any increase of the existing inflammation.

The after-treatment may be of any of the usual cooling, bland, or astringent lotions, such as solution of acet. plumbi or acet. ammoniæ in water, vinegar and spirits of wine, camphor-water, etc., all of which must be applied according to the principles of surgery adapted to traumatic dermatitis.

[We think this is the same insect which is known in the Eastern and Middle States as the *tick*, and which is met with abundantly in the dry, sandy regions where one species of whortleberry grows.—Ed. *P. M. T.*]

Sympathetic Disease in the Marrow of Bone in cases of Internal Disease (Dr. E. Ponfick: *Virchow's Archiv*, vol. 56, 4th part, 1872).—Before Neumann and Bizzozero had pointed out the close relationship between the parenchyma of the spleen and medulla of bones, and had likewise pointed out the important part this medulla of the bones plays in the formation of the blood, Von Recklinghausen demonstrated, by means of experiments, the analogy existing between certain elements of both organs. He found that after the introduction of insoluble coloring-matter into the circulation, a rapid passage of the same took place into the parenchyma of the most various organs, among them the medulla of bones. He also showed most conclusively how great a part the contractility of certain medullary elements plays in the vital processes of the internal organism.

The experiments which Ponfick has made at the suggestion of Von Recklinghausen, to carry out still further these views, have led to the following results:

These cell-forms belonging to the medulla of bones, which resemble morphologically the elements of the "spleen-pulp," correspond also, in general, with the latter in their reaction with the granules of the coloring-matter conducted to them through the blood; and also in all important and essential points. The two first-named observers demonstrated that analogous features in the circulation existed both in the spleen and medullary structure of bone, since the small arteries pass directly into disproportionately larger blood-vessels, bounded by an extremely thin and delicate membrane, the analogue of the cavernous veins of the spleen. In the experiments performed by Ponfick upon animals deprived of their spleens, this fact has been established, viz.: That the cinnabar introduced into the blood of animals previously deprived of their spleens arranges itself in the same places and in the same way in the marrow of such animals, thus proving the entire independence of the medullary and splenic deposition of the cinnabar, as well as the co-ordinate position of the two structures in relation to the blood.

Change of Color in the Hair (*Lancet*, May 7).—Several historical and well-known cases (as those of Maria Theresa, Ludovico Sforza, and Mary Stuart) corroborate the simple but affecting statement made by the Abbé Lefevre the other day in the Tichborne trial in reference to the sudden change of color his hair had undergone. He had heard, he said, of the death of his father, and on the following night dreamt that the details of his death were enacted before his eyes. He awoke terribly agitated, and found that his hair had become white. A curious instance lately came under our observation, in which a black retriever puppy received a violent kick from a horse, which caused fracture of the thigh. By the time the fracture had united, the dog's hair had changed from a deep black to a light brindle. The dog is now fully grown, but the hair has not recovered its original color.

To what can this change be attributed? The answer is not easy. Is it due to the extrication of air? Is it a consequence of the absorption of pigment, or the result of the action of some chemical compound, as an acid, eliminated by the skin? Under any circumstances it is singular that the influence should be limited to the hairs alone, and should not, apparently, otherwise affect the integument. The circumstances under which it usually occurs point to the nervous system as a principal agent, and this is supported by the occurrence of white hairs in the eyebrows and temples after severe attacks of neuralgia. Still, it may be asked, is it an instance of the direct action of the nervous system upon the hair-cells, or indirect upon the vessels of the surface? It would be interesting to know how the white color makes its appearance—from the apex to the root, or *vice versâ*.

The Pathology and Treatment of Hooping-cough (*Ib.*).—In a paper published in the *Swiss Correspondenzblatt* of April, 1873, Dr. Rudolf Meyer, of Zurich, gives an interesting account of some auto-laryngoscopic observations he made whilst suffering from a well-marked attack of this disease. He found the mucous membrane of the under-surface of the epiglottis and of the adjoining parts of the entrance into the glottis, and especially that covering the so-called arytænoid cushion, swollen and red, whilst that of the adjoining parts of the pharynx was also distinctly inflamed. The vocal cords and the lateral and internal parts of the larynx were normal. The inflamed parts were highly sensitive, the least touch bringing on spasmodic cough. In another case, occurring in a middle-aged woman, the same conditions were ascertained to be present. Dr. Meyer effected a cure in his own person in a few days by insufflating some powdered alum; but on trying the same plan with the lady, retching was induced, and he was obliged to use solutions of alum and tannin, which proved successful, though less rapid in action. The plan suggested by Dr. Meyer may be carried out with advantage in adults who are steady, but it is difficult to see how it could be applied in children.

Causes producing the Development of the Sexes (E. Baust: *Stuttgart. Journal für Kinderkrankheiten*, 1872, Hefte 3-4).—The first point considered in this work is the natural tendencies in the development of the sex of the embryo. Under this head there are three

hypotheses. 1. All embryos tend to become females,—a very old theory. 2. The embryo from its beginning has its peculiar sex (Carus, Rathke, Burdach). 3. The theory of St.-Hilaire, Ackermann, Müller, and others, that the embryo possesses no sex, but gradually develops into a male or female according to its inherent tendencies. A variety of experiments upon plants gave the interesting results that by means of heat, light, and absence of moisture we may produce specimens of the male plant, while in the shade, dampness, and by means of manure we can produce more female plants. Hence we may assume the following law: Influences which predispose the seed to rapid development will be apt to engender females, while influences of an opposite nature will most likely produce males.

In accordance with this theory is the fact that honey-bees, the workers, which grow to maturity under meagre nourishment, may become perfect females if while in a larval condition they are fed with the food of the queen bee.

There is also another important element in the development of the sexes, drawn from the difference in the ages of the parents. The investigations of Hofacker, Sadler, Göhlert, and Boulenger have shown that when the age of the husband greatly exceeds that of the wife, more male children are born, and when the father is younger than the mother, more girls than boys are born.

FRAENKEL ON PLACENTAL SYPHILIS.—Dr. Ernest Fränkel (*Archiv für Gynaekologie*, April, 1873), in a most interesting and exhaustive paper on this subject, illustrated by some well-executed plates, and recording in detail the particulars of more than twenty cases, arrives at the following conclusions:

1. The placenta may become syphilitic, and there are certain characteristic indications of this.

2. The syphilitic placenta occurs only in hereditary or congenital syphilis in the fœtus.

3. The seat of the disease is different, according as the mother remains healthy and the syphilitic virus is communicated directly from the father to the ovum by means of the spermatozoa, or according as the mother is diseased.

In the former case, the affected fœtal villi of the placenta degenerate through cellular granulation, with consecutive obliteration and atrophy of the vessels, complicated frequently by marked proliferation and condensation of the epithelial covering of the villi.

4. In the second case, when the mother is syphilitic, the three following conditions are possible:

a. The mother, through the act of impregnation, is simultaneously affected with syphilis with the fœtus; diffused syphilis of the placental villi may then develop itself, but primary infection of the maternal parts—endometritis placentaris—is not excluded.

b. The mother has been infected with syphilis before or shortly after conception. The placenta may remain normal, or become diseased under the form of endometritis placentaris gummosa, or (according to Virchow) in a narrower sense—endometritis decidualis.

c. The mother becomes infected only during the latter months of pregnancy (seventh to tenth month). It then generally happens that, in case the father was healthy at the time of impregnation, the fœtus as well as the placenta are exempt from the alterations described above.

5. The infection of the fœtus by passing through the genital canal of the mother is rare, and not yet proved beyond doubt.

THE BLOOD IN RELAPSING FEVER.—According to the observations of Obermeier (*Medical Times and Gazette*, March 29, 1873), the blood of persons laboring under relapsing fever contains peculiar filiform bodies, which exhibit very active spontaneous movements. A drop of blood extracted from such a patient, and mounted, as usual, with the necessary precautions, presents these bodies among the corpuscles when magnifying powers of 400 to 900 are employed. They appear as extremely delicate threads of the thickness of a fibrous filament, and of the great length of one and a half to six times the diameter of a red blood-corpuscle or more. Several of the bodies may be seen on the field at once; and so long as the preparation is fresh, they exhibit active movements,—not only changes of form, moving and alternately coiling and uncoiling, but also changes of locality, by which they slowly or suddenly escape from the field of view. Altogether, the movements remind one of spermatozoa. Hitherto, Obermeier has found these filaments during the fever only, and shortly before or during the crisis,—not in the interval. Sometimes they are to be seen one day, and not the next. He could not find similar bodies in the blood of healthy persons, or of persons suffering from other diseases. Of their nature, he will not yet give a decided opinion.

THE PHRENIC NERVE PASSING THROUGH A VERY NARROW ISLAND (INSEL) OF THE SUBCLAVIAN VEIN (Wenzel-Gruber: *Virchow's Archiv*, January 10, 1873).—This peculiarity was observed in March, 1872, on the left side of a male subject which had been given to the medical students for the purpose of making a preparation of the vessels and nerves of the trunk.

The left subclavian vein divided into two branches in front of the anterior scalenus muscle, 1.4 centimetres exterior to its junction with the internal jugular vein, forming the left anonymous vein. There was an anterior as well as a posterior branch. The anterior branch was 7.8 millimetres, the posterior one was 6 millimetres wide. After running a distance of 4 millimetres, the branches united to form a common trunk. Thus the left subclavian vein, 1 centimetre external to its junction with the internal jugular vein, had formed a very narrow island (*insel*). This had the appearance of a very narrow opening, which possessed a transverse diameter of 4 millimetres and a vertical diameter of 2 millimetres. The phrenic nerve passed obliquely through this ring from above and without downwards and inwards. The nerve passed over the posterior branch, while the anterior branch lay upon the nerve.

Thus the left subclavian vein looked as though it were perforated by the left phrenic nerve.

A similar case has never been, so far as the author knows, reported in the literature of anatomy. The preparation is in his cabinet.

ALTERATIONS OF THE NERVOUS SYSTEM OF THE GREAT SYMPATHETIC IN CASES OF CONSTITUTIONAL SYPHILIS.—Dr. Petrow (*Virchow's Archiv*, Band 57, Heft 1, 1873), on examining portions of the plexus of the great sympathetic which he had taken (ten to twenty-four hours after death) from the bodies of individuals affected with acquired constitutional syphilis, has stated two sorts of pathological changes: 1. Modifications of the protoplasma of nervous cells, which become loaded with brilliant pigmentary corpuscles, increasing with the age of the disease, and often accompanied by colloid transformation of the cells; the cells of the endothelium surrounding the nervous cells frequently undergo the same gelatiniform transformation, and cannot then be distinguished from the nervous cells. These changes can exist without the interstitial connective tissue being impaired. 2. Modifications of the interstitial connective tissue with hyperplasia of the fibres, constituting large, irregular fasciculi, which push aside and compress the nervous cells and fibres. The cells are then atrophied, irregular, and dotted with pigment, whilst the fibres are flattened, and their myelin shows slight granulations.

THE TEMPERATURE IN DIPHTHERIA (by Dr. G. Faralli: *Le Mouvement Médical*, April 26, 1873; from *L'Imparziale*, March 1, 1873).—The author studied an epidemic of diphtheria with a view of noting the state of the temperature,—a subject which has given rise to much discussion. His observations are as follows:

1. At the onset, chills, vomiting, convulsions, delirium, and in a few hours the thermometer rises to 40° (C.). From this moment the temperature gradually falls until the third or fourth day, when the patient becomes apyretic (benignant form).

2. In other cases the temperature rises again on the fourth day, but never to the degree reached at the onset of the disease. This is due to the formation of new diphtheritic patches on the side previously unaffected, or to the engorgement of glands.

3. This secondary infection is particularly evident in the typhoid form, the column of mercury continuing to ascend until the moment of the patient's death.

These characters are subject to variations from complications; as for example in cases where stenosis of the larynx causes death, the temperature may remain normal.

PATHOGENIC INFLUENCE ON THE SKIN OF BROMIDE OF POTASSIUM EMPLOYED INTERNALLY.—In the *Wiener Med. Wochenschrift* (No. 6, 1873), Dr. J. Neumann has investigated the above subject. The author recalls the observations of Voisin of Paris, and Mitchell of Philadelphia, according to whom the employment of bromide of potassium in weak doses brings on eruptions similar to acne, with itching and the consecutive formation of indurated tubercles; whilst the prolonged use of the substance gives rise to the production of red tumors, which often become sore, of carbuncles, anthrax, eczema, and nettle-rash. Dr. Neumann states that, for his own part, he has observed eruptions very much like molluscoid acne coming on in successive outbreaks, and, in another case, a carbuncular eruption consisting of infiltrated tumors, with considerable loss of substance in the centre. The author inclines to think that the bromine passes into the blood, and thence into the various glands of the skin, and he accounts thus for the production of the eruption. It is known that the presence of bromide of potassium has been observed in urine, saliva, and the secretions of the skin.

ULCERATION OF THE TRACHEA AFTER TRACHEOTOMY (*British Medical Journal*, May 3).—Mr. Bennett May exhibited the trachea of a child, showing an erosive ulcer in its interior, which had terminated fatally by hemorrhage after tracheotomy. The operation had been done for œdema of the glottis following the imbibition of boiling water. The trachea-tube was removed on the fifth day, and, on reintroducing it a few hours afterwards to relieve the dyspnœa caused by the accumulation of mucus at the wound, a sudden gush of blood deluged the parts and destroyed the child. The ulcer due to the pressure of the tube was not above a line in depth, and appeared to have opened one of the anterior thyroid veins.

CARBOLIC ACID IN DIPHTHERITIS (*Deutsche Klinik*, No. 20, 1871; quoted from *Journal für Kinderkrankheiten*, vols. iii. and iv., 1872).—Dr. Helfer, in Leipsic, has tried this drug in a series of cases of scarlet fever complicated by diphtheritis, after all other remedies had failed. It was used as a gargle in the strength of 1 to 200 every half-hour; for the "atomizer," 1 to 50 every two or three hours.

INVERSION OF THE UTERUS (*British Medical Journal*, May 3).—Mr. Prankerd read to the West Somerset Branch of the British Medical Association notes of an interesting case of inversion of the uterus which occurred a week after parturition, and, having resisted ordinary modes of reduction, gradually gave way under the continued employment of an air-pessary.

MISCELLANY.

AN ADVENTUROUS LIFE.—*The British Medical Journal* of April 26 contains the following account of the career of the late William Brydon, C.B., Surgeon-Major Bengal Army, and Highland Rifle Militia:

"He received the appointment of Assistant-Surgeon in the Honorable East India Company's Service, and landed in Calcutta in October, 1835, and, after a short stay there, was ordered up-country with European recruits. At Kurnaul he was temporarily attached to the artillery and Her Majesty's 13th Regiment, till posted to the 4th Lancers (native) as Assistant-Surgeon.

"He went twice with Sir Henry Fane, and a third time with the Governor-General, Lord Auckland, on escort-duty to Runjeet Sing's court, then in all its glory at Lahore.

"In 1839, he was put in charge of the 5th Native Infantry at Ferozepore, and marched with them through the Punjaub and Kyber pass, in the ill-fated expedition to Afghanistan. Here he saw much service when attached to Shah Soojah's 6th Regiment, and at the destruction of the robbers' forts in the Toormat Valley. Returning to Cabool before the disturbances broke out consequent on the vacillation of the British leaders, he was in the Balahissar for about three weeks; he then removed to the cantonments, and was in the fatal retreat in January, 1842. He suffered unparalleled privations in the march through the tremendous passes and narrow gorges of the Koora Cabool from the fire of the enemy and the inclemency of the weather, reaching Jellalabad wounded in the knee, badly in the left hand cut across by a sabre, and seriously in the head by an Afghan knife, which, but for a *Blackwood's Magazine* in his forage-cap, must certainly have killed him. He was thus the first and "last man" (the *sobriquet* by which he was known among Europeans in India), and gave the doleful tidings of the fate of the army (including camp-followers) of 16,500 that had miserably perished. He was one of the 'illustrious garrison' that held Jellalabad under General Sale, and, on Sir George Pollock reaching the beleaguered fortress, was attached to the 33d Native Infantry, and with that general retraced his steps to Cabool with the army of retribution, which on its return to Ferozepore in 1843 was received with high honor by the Governor-General, Lord Ellenborough. From this time he was chiefly in the Bhopal State—the Begum of which was honorably distinguished for her loyalty to Britain in 1857—till promoted in 1849 to the rank of Surgeon and posted to the 40th Native Infantry, with which he was sent to Burmah in 1852, being present at the taking of Rangoon, Prome, etc.

"After eighteen years of active service, he returned to his native land for three years on sick-leave, at the expiry of which India again, in the throes and convulsion of a rebellion, received his valuable services. During the siege of Lucknow he was severely wounded in the lower part of the spine by a rifle-bullet, which passed through his body from the left to the right side, and

from which he suffered during the rest of his life. In 1857, he was sent in charge of the field hospital from Lord Clyde's army at Cawnpore to Allahabad, holding various charges there, and subsequently being surgeon superintending at Dinapore. In 1859, he retired from the service on his well-earned laurels. Few medical officers have seen and passed through such arduous service, and none could grudge the honors conferred by his country in decorating him with medals for Jellalabad, Cabool, Burmah, clasp for Pegu, clasp for Lucknow, and Companion of the Bath in 1858.

"Settling down in the quiet Highland retreat of Westfield, Ross-shire, he sought rest in country pursuits, yet was ever ready to administer relief to the many who sought his advice. He was carried to his last resting-place in the Rosemarkie Burying Ground, followed by sorrowing relatives and the heartfelt regret of friends and neighbors, for a better and braver man than William Brydon one rarely met."

AN ETHNOLOGICAL WAR.—The *Lancet* says that the enmity between France and Germany has been transferred from the battle-field to the lecture-room, and M. Quatrefages has been eagerly followed in his disparaging speculations as to the genesis of the North German race. M. Quatrefages, on the publication of his views last year, was held to have done more harm to his own reputation than to the Prussians, and scarcely deserved the elaborate and conclusive refutation he experienced at the hands of Professor Virchow. If M. Quatrefages could prove that the Prussians came originally from the table-lands of Central Asia, he would only be doing what Dr. Prichard long ago did for the whole Celtic race,—the French part of it included. But, arguments from anatomical structure and moral development apart, the question of language is enough to dispose forever of all attempts to find a Mongol progeniture for the North Germans,—a question in which the French *savants* are as little a match for their German antagonists as Benedetti was for Bismarck, or MacMahon for Moltke.

DISEASED MEAT.—The *British Medical Journal* of May 10 says that, "At the police court in Dublin last week, a woman named Murtag was fined by the presiding magistrate the sum of £10 for exposing meat which was diseased for sale. The offender would have been sentenced to imprisonment but for the mistaken clemency of the solicitor for the Public Health Committee, who were the prosecutors, who begged the magistrate to inflict a fine because the defendant was a woman. Among the many privileges claimed for the sex, this is one of the strangest and least admissible. Women may be allowed to lecture us, to govern us, or to doctor us, but not to poison us."

CHOLERA IN AUSTRO-HUNGARY.—From the same source we learn that "The reports from Silesia on April 17 show that cholera had entirely ceased in that province of the Austrian empire. From its outbreak on November 28, 1872, to the above-named day, 702 cases had occurred in thirty localities with a population of 35,110 inhabitants; 374 had died, and 328 recovered. In Hungary, cholera has reappeared in several districts. In Pesth, which had been free since January 20, it broke out again on March 26. From March 26 to April 15 there were 74 new cases, of which 15 recovered and 39 died. In Galicia, during the first half of April, 201 new cases occurred; making, with 42 remaining under treatment, 243, of which 89 recovered and 88 died.

PHYSIOLOGICAL OBSERVATIONS ON THE ACTION OF LIGHT.—At a recent meeting of the Edinburgh Royal Society, Professor Dewar read a paper on further physiological experiments on the action of light, made by Dr. McKendrick and himself. He detailed the effects of light when the various parts of the eye were used for the purpose of determining electro-motive values, and also the effects of varied alkaloids on the sensibility of the retina. He showed that the moment light impinged on the retina the electro-motive force rose, and that there was also an increase of electro-motive force the moment light was withdrawn. They also traced the action of light not only into the optic nerve, but into the brain. The paper concluded with the measurement of the effects of different luminous intensities on the eye; and the authors showed that the experimental results agreed very closely with Fechner's psycho-physical law.

LORD SHAFTESBURY, the great social reformer, told, in a recent speech, of his having whitewashed and painted one of the dark houses occupied by a family in one of the foul districts of London, and a short time after returning to find it worse than ever. He said, "What on earth is this?" And the reply was, "Please your honor, the house looked so cold and uncomfortable that I sent for a sweep and asked him to give us a few warm touches."

LIBERAL.—A recent daily paper says, "As an encouragement to medical men, who certainly have enough to discourage them, we must mention the liberality of a grateful father in Augusta, Maine. Dr. C—— was called to attend a little child, and, after assiduous attention for three or four days, succeeded in rescuing the sufferer from the scarlet fever. The grateful father sent to Dr. C—— a fee of $1000."

IN the report of the Health Department of New York for the year 1872, alcoholism is returned as the direct cause of death in 314 cases; delirium tremens in 102 cases; and, indirectly, intemperance is given as the cause of death in altogether no less than 826 cases.

MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA.—The annual meeting of this body will be held in Carlisle, beginning on Wednesday, June 11.

Dr. DAVID SKAE, for twenty-seven years physician to the Morningside Asylum (for the insane) at Edinburgh, died recently, in his sixty-fifth year.

A SECOND human skeleton (pre-historic) is now said to have been discovered in the caves of Mentone. Human remains have also been found near Laval.

The cave in which they were found contained chipped flints, incised bones, and a hearth with calcined bones, together with the remains of many animals, among which the cave hyena, the common fox, the woolly rhinoceros, the horse, and the reindeer are enumerated. In a quarry in the neighborhood of the cave an interesting series of animal remains has been found, including the cave hyena, the cave lion, the marmot, a large hare, the mammoth, and the woolly rhinoceros, besides the fox, boar, horse, and several oxen and deer. Numerous bones of birds were also found.

THE Paris correspondent of the *Lancet* says that each of the four large hospitals of Paris where clinical medicine is officially taught has recently been endowed with a special and complete laboratory for researches in morbid anatomy, histology, and medical chemistry. Morbid specimens will thus be examined in every way by the gentlemen attached to the laboratory, who are appointed by the Minister on a list of presentation drawn up by the professors at each hospital. Those now in office are Dr. Lionville, at the Hôtel-Dieu; Dr. Nepveu, at La Pitié; Dr. Cornil, at La Charité; and Dr. Hybord, at the Hôpital des Cliniques.

THE MEDICAL SCHOOL AT NETLEY.—The session at Netley was opened on April 2, by an introductory lecture from Dr. De Chaumont, Assistant Professor of Hygiene. The numbers attending the course are as follows: Candidates for Indian army, sixteen; for navy, fourteen; naval surgeons on half-pay, six; army surgeons-major, five; army surgeons, twelve. The arrivals of invalids from India and other foreign stations have been very numerous lately, and nearly a thousand cases are now under treatment in hospital. Dr. Balfour, C.B., has assumed the duties of Principal Medical Officer.

ABORTION-MONGERS.—The *Clinic* says, "Such is the impunity with which this practice is carried on in Stamboul, that a pharmacien absolutely has for his sign the representation of a fœtus complete. A practitioner accused of this crime advanced in his defence the fact that he himself had invented an instrument for procuring abortion easily and satisfactorily."

AT the one hundred and seventh annual meeting of the New Jersey Medical Society, just closed at Mount Holly, Dr. T. J. Thompson was elected President; Drs. Schenck and Ryerson, Vice-Presidents; Dr. Pierson, Secretary. The meeting was well attended.

A NEW ARTICLE OF DIET.—Foreign advices state that the marmot, an animal analogous to our "woodchuck" or "ground-hog," has been introduced into the Parisian market, and has met with much favor among epicures.

MODERN INDUSTRY.—A Vienna journal contains the following announcement: "Anna Agrikol, sick-nurse, watches dead bodies, repairs straw chairs, applies leeches, and makes pastry desserts, and delicacies."

WEEKLY RETURN OF DEATHS AND INTERMENTS IN PHILADELPHIA FOR THE WEEK ENDING SATURDAY, MAY 31, 1873.

DISEASES.	Adults.	Minors.	DISEASES.	Adults.	Minors.
Abscess	1	...	Fracture of the Leg	...	1
Albuminuria	1	...	Gangrene	1	...
Apoplexy	6	...	Heart Clot	1	...
Asphyxia	...	1	Hemorrhage from Bow'ls	...	1
Burns and Scalds	...	1	" Lungs.	1	...
Cancer	1	...	Hooping-Cough	...	1
" of Breast	1	...	Inanition	1	4
" Face	1	...	Inflammation of Brain	2	8
" Liver	1	...	" Bronchi	2	2
Casualties	4	3	" Heart	1	1
Cerebro-Spinal Meningitis	3	6	" Kidneys'	1	...
Cholera Infantum	...	8	" Lungs	8	8
Congestion of Brain	3	6	" Peritoneum	5	...
" Liver	1	...	" Pleura	2	...
" Lungs	1	1	" Stomach & Bowels	4	4
Consumption of Bowels	1	...	Jaundice	2	...
" Lungs	33	8	Malformation	...	1
Convulsions	...	12	Marasmus	1	11
Croup	...	3	Old Age	12	...
Cyanosis	...	2	Paralysis	10	...
Debility	8	7	Paramenia	1	...
Diphtheria	...	2	Poisoning	2	...
Disease of Bladder	1	...	Pyæmia	1	...
" Brain	...	1	Rheumatism	1	...
" Heart	8	2	" of the Heart	3	...
" Kidneys	4	1	Rupture	1	1
Dropsy	2	3	" of Brain	...	3
" of Brain	1	4	Smallpox	1	4
" Chest	1	...	Softening of Brain	2	...
" Heart	2	...	Still-Born	...	15
" Ovaries	1	...	Stricture of Pylorus	1	...
Drowned	6	3	Suicide	2	...
Dysentery	1	...	Syphilis	1	1
Effusion on Brain	1	...	Teething	...	1
Erysipelas	...	1	Tumors	3	...
Fatty Degene'n of Heart.	1	...	Ulcers	1	...
" Liver.	1	...	Unknown	1	...
Fever, Inflammatory	1	...	Uræmia	1	...
" Puerperal	1	...	Wounds, Gunshot	1	...
" Remittent	1	1			
" Scarlet	...	13			
" Typhoid	6	...			
TOTALS				182	154

METEOROLOGICAL OBSERVATIONS TAKEN AT THE SIGNAL OFFICE, PHILADELPHIA, DURING THE WEEK ENDING SATURDAY, MAY 31, 1873.

Month and Day.	Barometer. Daily Mean	Thermom. Daily Mean	State of Weather.	Rain. In.
MAY.				
Sunday 25th	29.96	71	Fair, Clear.	.....
Monday 26th	30.09	74	Fair, Clear.	.....
Tuesday 27th	29.96	70	Fair.	.....
Wednesday 28th	29.86	78	Fair.	.01
Thursday 29th	30.01	75	Fair.	.....
Friday 30th	30.10	65	Clear, Cloudy.	.08
Saturday 31st	30.42	57	Clear.	.....
Means	30.05	70	.....	.09

The surface of the cistern of Barometer is located 71.92 feet above the mean level of the sea.

Barometer corrected for temperature, elevation above sea, and instrumental error.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM MAY 27, 1873, TO JUNE 2, 1873, INCLUSIVE.

HARTSUFF, ALBERT, ASSISTANT-SURGEON.—Relieved from duty in Department of the Lakes, and ordered to Department of the Platte for assignment to duty. S. O. 105, A. G. O., May 26, 1873.

MIDDLETON, J. V. D., ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Fort Buford, D. T. S. O. 107, Department of Dakota, May 22, 1873.

YEOMANS, A. A., ASSISTANT-SURGEON.—Relieved from duty in Department of the East, and ordered to Department of the Missouri for assignment to duty. S. O. 105, c. s., A. G. O.

STYER, CHARLES, ASSISTANT-SURGEON.—Assigned to duty as Post-Surgeon at Chattanooga, Tenn. S. O. 102, Department of the South, May 27, 1873.